UNITED STATES DISTRICT COURT

for the

Eastern District of Missouri

In the Matter of the Search of		
THE PREMISES LOCATED AT: 410 HORNSEY STREET, POTOSI, MISSOURI, 63664, LOCATED IN THE EASTERN DISTRICT OF MISSOURI.	Case No. 4:21-MJ-6163 PLC SIGNED AND SUBMITTED TO THE COURT FOR FILING BY RELIABLE ELECTRONIC MEANS	
APPLICATION FOR A SEARCH WARRANT		
request a search warrant and state under penalty of perjury property (identify the person or describe the property to be searched to	law enforcement officer or an attorney for the government, that I have reason to believe that on the following person or and give its location): ACHMENT A	
located in the EASTERN District of	MISSOURI , there is now concealed (identify the	
person or describe the property to be seized): SEE ATJ	ACHMENT B	
The basis for the search under Fed. R. Crim. P. 41(evidence of a crime; contraband, fruits of crime, or other items of property designed for use, intended for use a person to be arrested or a person who is a	illegally possessed; , or used in committing a crime;	
The search is related to a violation of:	•	
Code Section - (Offense Description duction, receipt, distribution, and possession of child	
The application is based on these facts: SEE ATTACHED AFFIDAVIT WHICH	IS INCORPORATED HEREIN BY REFERENCE	
 ✓ Continued on the attached sheet. □ Delayed notice of days (give exact endiunder 18 U.S.C. § 3103a, the basis of which is 		
I state under the penalty of perjury that the foregoing is true and correct.	Applicant's signature	
	Jason Hamlin, Special Agent Printed name and title	
Sworn to, attested to, and affirmed before me via reliable ed. 4.1 and 41	ectronic means pursuant to Federal Rules of Criminal Procedure	
Date:09/21/2021	Patricia L. Cohen Judge's signature	
City and state: St. Louis, MO	Honorable Patricia L. Cohen, U.S. Magistrate Judge	

Case: 4:21-mj-06163-PLC Doc. #: 1 Filed: 09/21/21 Page: 2 of 25 PageID #: 2

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MISSOURI

)) FILED UNDER SEAL
) ELECTRONIC MEANS
DISTRICT OF MISSOURI.) COURT FOR FILING BY RELIABLE
63664, LOCATED IN THE EASTERN) SIGNED AND SUBMITTED TO THE
HORNSEY STREET, POTOSI, MISSOURI,)
THE PREMISES LOCATED AT: 410) No. 4:21-MJ-6163 PLC
IN THE MATTER OF THE SEARCH OF)

AFFIDAVIT IN SUPPORT OF AN APPLICATION FOR A SEARCH WARRANT

I, Jason Hamlin, being first duly sworn, hereby depose and state as follows:

INTRODUCTION AND AGENT BACKGROUND

I make this affidavit in support of an application under Rule 41 of the Federal Rules of Criminal Procedure for a warrant to search the premises known as 410 HORNSEY STREET, POTOSI, MISSOURI 63664, further described in Attachment A, for the things described in Attachment B.

1. I am a Special Agent with the Federal Bureau of Investigation's ("FBI") Violent Crimes Against Children Task Force. I have been an FBI agent for over 11 years. I have conducted numerous investigations regarding the sexual exploitation of children that involve the use of a computer which has been used to commit a crime in violation of Title 18, United States Code, Sections 2251, 2252 and 2252A. As an FBI Special Agent, I am authorized to investigate violations of laws of the United States and to execute warrants issued under the authority of the United States. I have been personally involved in the execution of search warrants to search residences and seize material relating to the sexual exploitation of minors including computers, computer equipment, software, and electronically stored information. I have experience utilizing computers during my career as an investigator.

- 2. The facts in this affidavit come from my personal observations, my training and experience, and information obtained from other agents and witnesses. This affidavit is intended to show merely that there is sufficient probable cause for the requested warrant and does not set forth all my knowledge about this matter.
- 3. Based on my training and experience and the facts as set forth in this affidavit, there is probable cause to believe that violations of Title 18, United States Code, Sections 2251(a), 2252 and 2252A have been committed by **ZACHARY RYAN MULLER**, or other persons known and unknown. Sections 2251(a), 2252 and 2252A criminalize, among other things, the production, receipt, distribution, and possession of child pornography. There is also probable cause to search the information described in Attachment A for evidence of these crimes and contraband or fruits of these crimes, as described in Attachment B.

LOCATION TO BE SEARCHED

4. The location to be searched (the "SUBJECT PREMISES") is: 410 HORNSEY STREET, POTOSI, MISSORI 63664, a single-family home with an attached two car garage. The Premises is further described in the photographs in Attachment A.

DEFINITIONS

- 5. The following terms have the indicated meaning in this affidavit:
- a) The term "computer" means an electronic, magnetic, optical, electrochemical, or other high speed data processing device performing logical, arithmetic, or storage functions, and includes any data storage facility or communications facility directly related to or operating in conjunction with such a device, but such term does not include an automated typewriter or typesetter, a portable handheld calculator, or other similar device. 18 USC § 1030(e). The term computer includes cellular telephones.

- b) The term "minor" means any individual under the age of 18 years. 18 USC § 2256(1).
- c) "Sexually explicit conduct" means actual or simulated sexual intercourse, including genital-genital, oral-genital, anal-genital, or oral-anal, whether between persons of the same or opposite sex; bestiality; masturbation; sadistic or masochistic abuse; or lascivious exhibition of the anus, genitals, or pubic area of any person. 18 USC § 2256(2)(A).
- d) "Visual depiction" includes undeveloped film and videotape, and data stored on computer disk or by electronic means which is capable of conversion into a visual image. 18 USC § 2256(5).
- e) "Child pornography" includes any visual depiction, including any photograph, film, video, picture, or computer-generated image or picture, whether made or produced by electronic, mechanical, or other means, of sexually explicit conduct, where the production of such visual depiction involves the use of a minor engaging in sexually explicit conduct or such visual depiction has been created, adapted, or modified to appear that an identifiable minor is engaging in sexually explicit conduct. 18 USC § 2256(8)(A) or (C).
- f) "Identifiable minor" means a person who was a minor at the time the visual depiction was created, adapted, or modified; or whose image as a minor was used in creating, adapting, or modifying the visual depiction; and who is recognizable as an actual person by the person's face, likeness, or other distinguishing characteristic, such as a unique birthmark or other recognizable feature; and shall not be construed to require proof of the actual identity of the identifiable minor. 18 USC § 2256(9).

- g) "Computer hardware," as used herein, consists of all equipment which can receive, capture, collect, analyze, create, display, convert, store, conceal, or transmit electronic, magnetic, or similar computer impulses or data, including for example, tablets, digital music devices, portable electronic game systems, electronic game counsels and wireless telephones. Computer hardware includes any data-processing devices (including, but not limited to, central processing units, internal and peripheral storage devices such as fixed disks, external hard drives, floppy disk drives and diskettes, and other memory storage devices); peripheral input/output devices (including, but not limited to, keyboards, printers, video display monitors, and related communications devices such as cables and connections), as well as any devices, mechanisms, or parts that can be used to restrict access to computer hardware (including, but not limited to, physical keys and locks).
- h) "Computer software," as used herein, is digital information which can be interpreted by a computer and any of its related components to direct the way they work. Computer software is stored in electronic, magnetic, or other digital form. It commonly includes programs to run operating systems, applications, and utilities.
- i) "Computer-related documentation," as used herein, consists of written, recorded, printed, or electronically stored material which explains or illustrates how to configure or use computer hardware, computer software, or other related items.
- j) "Computer passwords and data security devices," as used herein, consist of information or items designed to restrict access to or hide computer software, documentation, or data. Data security devices may consist of hardware, software, or other programming code. A password (a string of alpha-numeric characters) usually operates as a sort of digital key to "unlock" particular data security devices. Data security hardware

may include encryption devices, chips, and circuit boards. Data security software or digital code may include programming code that creates "test" keys or "hot" keys, which perform certain pre-set security functions when touched. Data security software or code may also encrypt, compress, hide, or "booby-trap" protected data to make it inaccessible or unusable, as well as reverse the progress to restore it.

- k) The terms "records," "documents," and "materials," as used herein, include all information recorded in any form, visual or aural, and by any means, whether in handmade form (including, but not limited to, writings, drawings, painting), photographic form (including, but not limited to, microfilm, microfiche, prints, slides, negatives, videotapes, motion pictures, photocopies), mechanical form (including, but not limited to, phonograph records, printing, typing) or electrical, electronic or magnetic form (compact discs, electronic or magnetic storage devices, hard disks, CD-ROMs, DVDs, Personal Digital Assistants (PDAs), Multi Media Cards (MMCs), thumb drives, flash drives, optical disks, printer buffers, smart cards, memory calculators, electronic dialers, electronic notebooks, cellular telephones, as well as digital data files and printouts or readouts from any magnetic, electrical or electronic storage device).
- l) Electronic data may be more fully described as any information stored in the form of electronic, magnetic, optical, or other coding on computer media or on media capable of being read by a computer or computer-related equipment.
- m) "Wireless telephone or mobile telephone, or cellular telephone" as used herein means is a handheld wireless device used for voice and data communication through radio signals. These telephones send signals through networks of transmitter/receivers, enabling communication with other wireless telephones or traditional "land line"

telephones. A wireless telephone usually contains a "call log," which records the telephone number, date, and time of calls made to and from the phone. In addition to enabling voice communications, wireless telephones offer a broad range of capabilities. These capabilities include: storing names and phone numbers in electronic "address books;" sending, receiving, and storing text messages and e-mail; taking, sending, receiving, and storing still photographs and moving video; storing and playing back audio files; storing dates, appointments, and other information on personal calendars; and accessing and downloading information from the Internet. Wireless telephones may have wireless connection capabilities such as Wi-Fi and Bluetooth. Wireless telephones may also include global positioning system ("GPS") technology for determining the location of the device.

COMPUTERS AND CHILD PORNOGRAPHY

- 6. From my own training and experience in the area of Internet-based child exploitation investigations, and through consultation with other knowledgeable law enforcement officials, I know the following to be true. Computers connected to the Internet identify each other by an Internet Protocol ("IP") address. An IP address can assist law enforcement in finding a particular computer on the Internet. These IP addresses can typically lead a law enforcement officer to a particular Internet service company and that company can typically identify the account that uses or used the address to access the Internet.
- 7. The information contained in this section is based upon my knowledge, training, and experience in child exploitation and child pornography investigations, and the experience and training of other law enforcement officers with whom I have had discussions.
- 8. Computers and computer technology have revolutionized the way in which child pornography is produced, distributed and utilized. Prior to the advent of computers and the

Internet, child pornography was produced using cameras and film, resulting in either still photographs or movies. The photographs required darkroom facilities and a significant amount of skill in order to develop and reproduce the images. As a result, there were definable costs involved with the production of pornographic images. To distribute these images on any scale also required significant resources. The photographs themselves were somewhat bulky and required secure storage to prevent their exposure to the public. The distribution of these wares was accomplished through a combination of personal contacts, mailings, and telephone calls, and compensation for these wares would follow the same paths. More recently, through the use of computers and the Internet, distributors of child pornography use membership-based/ subscription-based Web sites to conduct business, allowing them to remain relatively anonymous. Child pornography is also traded through chat rooms and file sharing software.

a. Producers of child pornography can now produce both still and moving images directly from a common video or digital camera. The camera is attached, using a device such as a cable, or digital images are often uploaded from the camera's memory card, directly to the computer. Images can then be stored, manipulated, transferred, or printed directly from the computer. Images can be edited in ways similar to how a photograph may be altered. Images can be lightened, darkened, cropped, or otherwise manipulated. The producers of child pornography can also use a device known as a scanner to transfer photographs into a computer-readable format. As a result of this technology, it is relatively inexpensive and technically easy to produce, store, and distribute child pornography. In addition, there is an added benefit to the pornographer in that this method of production does not leave as large a trail for law enforcement to follow.

- b. The Internet allows any computer to connect to another computer. By connecting to a host computer, electronic contact can be made to literally millions of computers around the world. A host computer is one that is attached to a network and serves many users. Host computers are sometimes operated by commercial ISPs, such as America Online ("AOL") and Microsoft, which allow subscribers to dial a local number and connect to a network which is, in turn, connected to the host systems. Host computers, including ISPs, allow e-mail service between subscribers and sometimes between their own subscribers and those of other networks. In addition, these service providers act as a gateway for their subscribers to the Internet or the World Wide Web.
- c. The Internet allows users, while still maintaining anonymity, to easily locate (i) other individuals with similar interests in child pornography; and (ii) Web sites that offer images of child pornography. Child pornography collectors can use standard Internet connections, such as those provided by businesses, universities, and government agencies, to communicate with each other and to distribute child pornography. These communication links allow contacts around the world as easily as calling next door. Additionally, these communications can be quick, relatively secure, and as anonymous as desired. All of these advantages, which promote anonymity for both the distributor and recipient, are well known and are the foundation of transactions between child pornography collectors over the Internet. Sometimes the only way to identify both parties and verify the transportation of child pornography over the Internet is to examine the recipient's computer, including the Internet history and cache to look for "footprints" of the Web sites and images accessed by the recipient.

d. The computer's capability to store images in digital form makes it an ideal repository for child pornography. The size of the electronic storage media (commonly referred to as a hard drive) used in home computers has grown tremendously within the last several years. These drives can store thousands of images at very high resolution. Magnetic storage located in host computers adds another dimension to the equation. It is possible to use a video camera to capture an image, process that image in a computer with a video capture board and save that image to storage in another country. Once this is done, there is no readily apparent evidence at the "scene of the crime". Only with careful laboratory examination of electronic storage devices is it possible to recreate the evidence trail.

PROBABLE CAUSE

- 9. FBI Milwaukee, in collaboration with the Winnebago County, Wisconsin, Sheriff's Office is currently investigating numerous groups of individuals engaged in the receipt, possession, distribution and possible production of child sexual abuse material. To date, the investigation has identified over 3,500 unique Kik profiles who are either actively distributing child sexual abuse material or committing hands-on sexual assault of children. Many of these Kik profiles have been linked to identified individuals located both domestically and internationally.
- 10. An online covert employee from the Winnebago County Sheriff's office observed Kik user ZACKASS2 distributing child sexual abuse material within a group on Kik named "[kissing face heart emoji] Baby{kissing face heart emoji}", which has been established as dedicated to the trade of child sexual abuse material. As a member of the Kik group, the user ZACKASS2 would have access to multiple images and videos of child sexual abuse material. ZACKASS2 also distributed child sexual abuse material through the Kik group. On May 4, 2020,

at approximately 7:50 a.m. Central Time, ZACKASS2 distributed the following material through

the Kik group: IMG 4405.jpg, which depicts a nude infant of unknown gender tied by the ankles

and wrist to a piece of cardboard with its buttocks exposed.

The FBI sent a subpoena to Kik requesting subscriber data for the account 11.

ZACKASS2. The Kik subscriber data revealed the following account information:

First name: Zack

Last name: Jo

Email: zackjoe801@gmail.com.

12. The FBI sent a subpoena to Google requesting information for subscriber data for

the account zackjoe801@gmail.com. The Google subscriber data revealed a Verizon phone

number 573-436-3082 for the subscriber.

The FBI sent a subpoena to Verizon for subscriber and historical detail records for 13.

phone number 573-436-3082. The Verizon subscriber data and historical call detail records

revealed that the subscriber for phone number 573-436-3082 was Zachary Muller at 410 Hornsey

Street, Potosi, Missouri 63664, located in the Eastern District of Missouri.

14. On or about June 8, 2021, the information concerning the investigation was sent

via electronic communication to FBI SA Jason Hamlin of the St. Louis Division Rolla Residence

Agency. SA Hamlin confirmed the Zachary Muller's name and residence through Thomson

Reuters Clear database, Department of Motor Vehicle checks, and criminal background checks

through the MULES database.

15. SA Hamlin contacted local law enforcement officers who confirmed that 410

Hornsey Street was occupied, but the officers did not know the names of the occupants. SA Hamlin

performed an online public database search through Thomson Reuters Clear that showed that

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Zachary Ryan Muller lives at 410 Hornsey Street, Potosi, Missouri.

16. On September 7, 2021 SA Hamlin conducted physical surveillance of 410 Hornsey Street, Potosi, Missouri, and photographed the residence. A photograph of the residence is included in Attachment A.

SEIZURE OF EQUIPMENT AND DATA

- 15. Based upon my knowledge, training and experience, I know that in order to completely and accurately retrieve data maintained in computer hardware or on computer software, to ensure accuracy and completeness of such data, and to prevent the loss of the data either from accidental or programmed destruction, it is often necessary that some computer equipment, peripherals, related instructions in the form of manuals and notes, as well as the software utilized to operate such a computer, be seized and subsequently processed by a qualified computer specialist in a laboratory setting. This is true because of the following:
 - a. The volume of evidence. Computer storage devices (such as hard disks, diskettes, tapes, laser disks, etc.) can store the equivalent of thousands of pages of information. Additionally, a user may seek to conceal criminal evidence by storing it in random order with deceptive file names. Searching authorities are thus required to examine all the stored data to determine which particular files are evidence or instrumentalities of criminal activity. This sorting process may take weeks or months, depending on the volume of data stored and it would be impractical to attempt this kind of data analysis on-site.
 - b. <u>Technical requirements</u>. Analyzing computer systems for criminal evidence is a highly technical process requiring expert skill and a properly controlled environment. The vast array of computer hardware and software available requires even computer experts to specialize in some systems and applications. Thus, it is difficult to know prior to

the search which expert possesses sufficient specialized skills to best analyze the system and its data. No matter which system is used, however, data analysis protocols are exacting scientific procedures, designed to protect the integrity of the evidence and to recover even "hidden", erased, compressed, password-protected, or encrypted files. Since computer evidence is extremely vulnerable to tampering or destruction (both from external sources or from destructive code imbedded in the system as a "booby trap"), a controlled environment is essential to its complete and accurate analysis.

Due to the volume of the data at issue and the technical requirements set forth 16. above, it may be necessary that the above-referenced equipment, software, data, and related instructions be seized and subsequently processed by a qualified computer specialist in a laboratory setting. Under appropriate circumstances, some types of computer equipment can be more readily analyzed and pertinent data seized on-site, thus eliminating the need for its removal from the premises. One factor used in determining whether to analyze a computer on-site or to remove it from the premises is whether the computer constitutes an instrumentality of an offense and is thus subject to immediate seizure as such-- or whether is serves as a mere repository for evidence of a criminal offense. Another determining factor is whether, as a repository for evidence, a particular device can be more readable, quickly, and thus less intrusively analyzed off site, with due consideration given to preserving the integrity of the evidence. This, in turn, is often dependent upon the amount of data and number of discrete files or file areas that must be analyzed, and this is frequently dependent upon the particular type of computer hardware involved. As a result, it is ordinarily impossible to appropriately analyze such material without removing it from the location where it is seized.

- 17. Computer files or remnants of such files can be recovered months or even years after they have been downloaded onto a hard drive, deleted or viewed via the Internet. Electronic files downloaded to a hard drive can be stored for years at little or no cost. Even when such files have been deleted, they can be recovered months or years later using readily available forensic tools. When a person "deletes" a file on a home computer, the data contained in the file does not actually disappear; rather, that data remains on the hard drive until it is overwritten by new data. Therefore, deleted files, or remnants of deleted files, may reside in free space or slack space - that is, in space on the hard drive that is not allocated to an active file or that is unused after a file has been allocated to a set block of storage space - - for long periods of time before they are overwritten. In addition, a computer's operating system may also keep a record of deleted data in a "swap" or "recovery" file. Similarly, files that have been viewed via the Internet are automatically downloaded into a temporary Internet directory or "cache." The browser typically maintains a fixed amount of hard drive space devoted to these files, and the files are only overwritten as they are replaced with more recently viewed Internet pages. Thus, the ability to retrieve residue of an electronic file from a hard drive depends less on when the file was downloaded or viewed than on a particular user's operating system, storage capacity, and computer habits.
- 18. Based upon my knowledge, training, and experience, and the experience of other law enforcement personnel with whom I have spoken, I am aware that searches and seizures of evidence from computers taken from the subject premises commonly require agents to seize most or all of a computer system's input/output peripheral devices, in order for a qualified computer expert to accurately retrieve the system's data in a laboratory or other controlled environment. Therefore, in those instances where computers are removed from the subject premises, and in order

to fully retrieve data from a computer system, investigators must seize all magnetic storage devices as well as the central processing units (CPU) and applicable keyboards and monitors which are an integral part of the processing unit. If, after inspecting the input/output devices, system software, and pertinent computer-related documentation it becomes apparent that these items are no longer necessary to retrieve and preserve the data evidence, such materials and/or equipment will be returned within a reasonable time.

19. Additionally, based upon my training and experience and information related to me by agents and others involved in the forensic examination of computers, I know that routers, modems, and network equipment used to connect computers to the Internet often provide valuable evidence of, and are instrumentalities of, a crime. This is equally true of so-called "wireless routers," which create localized networks that allow individuals to connect to the Internet wirelessly. Though wireless networks may be "secured" (in that they require an individual to enter an alphanumeric key or password before gaining access to the network) or "unsecured" (in that an individual may access the wireless network without a key or password), wireless routers for both secured and unsecured wireless networks may yield significant evidence of, or serve as instrumentalities of, a crime—including, for example, serving as the instrument through which the perpetrator of the Internet-based crime connected to the Internet and, potentially, containing logging information regarding the time and date of a perpetrator's network activity as well as identifying information for the specific device(s) the perpetrator used to access the network. Moreover, I know that individuals who have set up either a secured or unsecured wireless network in their residence are often among the primary users of that wireless network.

SEARCH METHODOLOGY TO BE EMPLOYED

- 20. The search procedure of electronic data contained in computer hardware, computer software, and/or memory storage devices may include the following techniques (the following is a non-exclusive list, as other search procedures may be used):
 - a) on-site triage of computer system(s) and computer hardware to determine what, if any, peripheral devices and/or digital storage units have been connected to such computer system(s), as well as a preliminary scan of image files contained on such system(s) and digital storage device(s) to help identify any other relevant evidence and/or potential victim(s);
 - b) examination of all of the data contained in such computer hardware, computer software, and/or memory storage devices to view the data and determine whether that data falls within the items to be seized as set forth herein;
 - c) searching for and attempting to recover any deleted, hidden, or encrypted data to determine whether that data falls within the list of items to be seized as set forth herein (any data that is encrypted and unreadable will not be returned unless law enforcement personnel have determined that the data is not (1) an instrumentality of the offenses, (2) a fruit of the criminal activity, (3) contraband, (4) otherwise unlawfully possessed, or (5) evidence of the offenses specified above);
 - d) surveying various file directories and the individual files they contain;
 - e) opening files in order to determine their contents;
 - f) scanning storage areas;

- g) performing key word searches through all electronic storage areas to determine whether occurrences of language contained in such storage areas exist that are likely to appear in the evidence described in Attachment B; and/or
- h) performing any other data analysis technique that may be necessary to locate and retrieve the evidence described in Attachment B.

USE OF BIOMETRIC FEATURES TO UNLOCK ELECTRONIC DEVICES

- 21. The warrant I am applying for would permit law enforcement to compel MULLER to unlock a device subject to seizure pursuant to this warrant that is his possession or for which law enforcement otherwise has a reasonable basis to believe is used by him using the device's biometric features. I seek this authority based on the following:
 - a. I know from my training and experience, as well as from information found in publicly available materials published by device manufacturers, that many electronic devices, particularly newer mobile devices and laptops, offer their users the ability to unlock the device through biometric features in lieu of a numeric or alphanumeric passcode or password. These biometric features include fingerprint scanners, facial recognition features, and iris recognition features. Some devices offer a combination of these biometric features, and the user of such devices can select which features they would like to utilize.
 - b. I have probable cause to believe that one or more of the electronic devices in the SUBJECT PREMISES are likely to offer its user the ability to use biometric features to unlock the device(s). Your lew knows that many smart phones use fingerprint sensor technology and facial recognition to unlock the phone.

- c. If a device is equipped with a fingerprint scanner, a user may enable the ability to unlock the device through his or her fingerprints. For example, Apple offers a feature called "Touch ID," which allows a user to register up to five fingerprints that can unlock a device. Once a fingerprint is registered, a user can unlock the device by pressing the relevant finger to the device's Touch ID sensor, which is found in the round button (often referred to as the "home" button) located at the bottom center of the front of the device. The fingerprint sensors found on devices produced by other manufacturers have different names but operate similarly to Touch ID.
- d. If a device is equipped with a facial recognition feature, a user may enable the ability to unlock the device through his or her face. For example, this feature is available on certain Android devices and is called "Trusted Face." During the Trusted Face registration process, the user holds the device in front of his or her face. The device's front-facing camera then analyzes and records data based on the user's facial characteristics. The device can then be unlocked if the front-facing camera detects a face with characteristics that match those of the registered face. Facial recognition features found on devices produced by other manufacturers have different names but operate similarly to Trusted Face.
- e. If a device is equipped with an iris recognition feature, a user may enable the ability to unlock the device with his or her irises. For example, on certain Microsoft devices, this feature is called "Windows Hello." During the Windows Hello registration, a user registers his or her irises by holding the device in front of his or her face. The device then directs an infrared light toward the user's face and activates an infrared-sensitive camera to record data based on patterns within the user's irises. The device can then be

unlocked if the infrared-sensitive camera detects the registered irises. Iris recognition features found on devices produced by other manufacturers have different names but operate similarly to Windows Hello.

- f. In my training and experience, users of electronic devices often enable the aforementioned biometric features because they are considered to be a more convenient way to unlock a device than by entering a numeric or alphanumeric passcode or password. Moreover, in some instances, biometric features are considered to be a more secure way to protect a device's contents. This is particularly true when the users of a device are engaged in criminal activities and thus have a heightened concern about securing the contents of a device.
- g. As discussed in this affidavit, based on my training and experience I believe that one or more digital devices will be found during the search. The passcode or password that would unlock the device(s) subject to search under this warrant is not known to law enforcement. Thus, law enforcement personnel may not otherwise be able to access the data contained within the device(s), making the use of biometric features necessary to the execution of the search authorized by this warrant.
- h. I also know from my training and experience, as well as from information found in publicly available materials including those published by device manufacturers, that biometric features will not unlock a device in some circumstances even if such features are enabled. This can occur when a device has been restarted, inactive, or has not been unlocked for a certain period of time. For example, Apple devices cannot be unlocked using Touch ID when (1) more than 48 hours has elapsed since the device was last unlocked or (2) when the device has not been unlocked using a fingerprint for 8 hours and the passcode

or password has not been entered in the last 6 days. Similarly, certain Android devices cannot be unlocked with Trusted Face if the device has remained inactive for four hours. Biometric features from other brands carry similar restrictions. Thus, in the event law enforcement personnel encounter a locked device equipped with biometric features, the opportunity to unlock the device through a biometric feature may exist for only a short time.

22. Due to the foregoing, if law enforcement personnel encounter a device that is subject to seizure pursuant to this warrant and may be unlocked using one of the aforementioned biometric features, and the device is in MULLER'S possession or law enforcement otherwise has a reasonable basis to believe is used by MULLER, the warrant I am applying for would permit law enforcement personnel to (1) press or swipe the fingers (including thumbs) of MULLER, to the fingerprint scanner of the device(s) found at the premises; (2) hold the device(s) found at the premises in front of the face of MULLER, and activate the facial recognition feature; and/or (3) hold the device(s) found at the premises in front of the face of MULLER, and activate the iris recognition feature, for the purpose of attempting to unlock the device(s) in order to search the contents as authorized by this warrant.

CONCLUSION

23. Based on the above information, there is probable cause to believe that the SUBJECT OFFENSES have been violated, and that the property, evidence, fruits and instrumentalities of these offenses, more fully described in Attachment B of this Affidavit, are located at the SUBJECT PREMISES described in Attachment A, and any computers, computer media, or wireless telephones therein, and more fully described herein. Your Affiant requests

authority to seize such material, specifically, that the Court issue a search warrant for these premises and all computers, computer hardware and media, and wireless telephones therein.

I state under the penalty of perjury that the foregoing is true and correct.

Special Agent

Federal Bureau of Investigation

Sworn to, attested to, and affirmed before me via reliable electronic means pursuant to Federal Rules of Criminal Procedure 4.1 and 41 on this 21st day of September 2021.

<u>Patricia L. Cohen</u>

PATRICIA L. COHEN

United States Magistrate Judge

ATTACHMENT A DESCRIPTION OF LOCATION TO BE SEARCHED

The premises known as the 410 HORNSEY STREET, POTOSI, MISSOURI 63664, is referred to herein as the SUBJECT PREMISES and is described follows: a single-family residence with an attached two car garage as follows:



410 HORNSEY STREET, POTOSI, MISSOURI 63664

ATTACHMENT B LIST OF ITEMS TO BE SEIZED

All records, items, and information constituting evidence, instrumentalities and contraband concerning the violations of Title 18, United States Code, Sections 2251(a), 2252, and 2252A, including as follows:

- 1. All visual depictions, including still images, videos, films or other recordings of child pornography or minors engaged in sexually explicit conduct, as defined in 18 U.S.C. § 2256, and any mechanism used for the distribution, receipt or storage of the same, including but not limited to:
 - a. Any computer, cell phone, computer system and related peripherals including and data processing devices and software (including but not limited to central processing units; internal and peripheral storage devices such as fixed disks, external hard drives, floppy disk drives and diskettes, routers, PDA's, gaming consoles, cell phones, computer compact disks, CD-ROMS, DVD, and other memory storage devices) (hereinafter referred to collectively as Devices);
 - b. peripheral input/output devices (including but not limited to keyboards, printer, video display monitors, scanners, digital cameras, and related communications devices such as cables and connections); and
 - c. any devices, mechanisms, or parts that can be used to restrict access to computer hardware (including but not limited to physical keys and locks).
- 2. Any and all computer and cell phone passwords and other data security devices designed to restrict access to or hide computer or cell phone software, documentation, or data. Data security devices may consist of hardware, software, or other programming code.

- 3. Any and all documents, records, materials, emails, and/or internet history (in documentary or electronic form) pertaining to the possession, receipt, distribution, or production of child pornography or visual depictions of minors engaged in sexually explicit conduct, as defined in 18 U.S.C. § 2256, or pertaining to an interest in child pornography whether transmitted or received.
- 4. Any and all records, documents, records, materials, invoices, notes and/or materials that pertain to accounts with any Internet Service Provider, as well as any and all records relating to the ownership or use of computer equipment found in the residence.
- 5. Documents, records and/or materials regarding the ownership and/or possession of the SUBJECT PREMISES.
- 6. During the course of the search, photographs and/or videos of the SUBJECT PREMISES may also be taken to record the condition thereof and/or the location of items therein.
- 7. During the execution of the search of the SUBJECT PREMISES, law enforcement personnel are also specifically authorized to obtain from ZACHARY RYAN MULLER, if he is on the SUBJECT PREMISES at the time of execution of the warrant, the display of any physical biometric characteristics (such as fingerprint/thumbprint, facial characteristics, or iris display) necessary to unlock any electronic device, such as, but not limited to computers, computer hardware, cell phones, and tablets, requiring such biometric access subject to seizure pursuant to this warrant, that is, including pressing fingers or thumbs against and/or putting a face before the sensor, or any other security feature requiring biometric recognition, of:
 - (a) any of the Device(s) found at the SUBJECT PREMISES that are in the possession of, or known to be used by, ZACHARY RYAN MULLER,

(b) where the Device(s) are limited to those which are capable of containing and reasonably could contain fruits, evidence, information, contraband, or instrumentalities of the offense(s) as described in the search warrant affidavit and warrant attachments, for the purpose of attempting to unlock the electronic device(s)'s, which include, but are not limited to, computers, computer hardware, cell phones, and tablets, security features in order to search the contents as authorized by this warrant.

The terms "records," "documents," and "materials," as used in Attachment B, include all information recorded in any form, visual or aural, and by any means, whether in handmade form (including, but not limited to, writings, drawings, painting), photographic form (including, but not limited to, microfilm, microfiche, prints, slides, negatives, videotapes, motion pictures, photocopies), mechanical form (including, but not limited to, phonograph records, printing, typing) or electrical, electronic or magnetic form (compact discs, electronic or magnetic storage devices, hard disks, CD-ROMs, DVDs, Personal Digital Assistants (PDAs), Multi Media Cards (MMCs), thumb drives, flash drives, optical disks, printer buffers, smart cards, memory calculators, electronic dialers, electronic notebooks, cellular telephones, as well as digital data files and printouts or readouts from any magnetic, electrical or electronic storage device).